Study	Stressor	Exposed-only	Depression measure	P-value	Sample size	Outcome coding	Abstract coding
Aguilera (2009)	Childhood sexual abuse	No	SCL-90-R (depression scale)	<0.0001	452	Positive	Positive
Antypa (2010)	Childhood emotional abuse	No	Major Depression Questionnaire	0.59	248	Negative	Negative
Araya (2009)	Stressful life events	No	SDQ (emotional symptoms scale)	0.23	4334	Negative	Negative
Aslund (2009)	Childhood maltreatment	No	DSRS (symptoms) DSRS (diagnosis)	0.016 0.015	1482	Positive	Partially supportive
Beaver (2012)	Perceived stress	No	CES-D	0.001	1702	Positive	Partially supportive
Benjet (2010)	Relational peer victimization	No	CDI	0.03	78	Positive	Positive
Brown (2013)	Childhood maltreatment Life events	No	SCAN (prospective) SCAN (retrospective, chronic) SCAN (prospective)	0.3916 0.0017 0.9745	273	Negative	Positive
Brummett (2008)	Caregiving stress Father's low education	No	CES-D Obvious Depression Scale	n/a n/a	288 (Study 1) 142 (Study 2)	Unclear	Partially supportive
Bull (2009)	Interferon-alpha treatment for hepatitis C	Yes	BDI (one center)/ZSDS (one center)	0.03	98	Positive	Positive
Carli (2011)	Childhood abuse	No	HDRS	0.0026 (opposite)	763	Negative	Negative
Caspi (2003)	Stressful life events Childhood maltreatment	No	Depressive symptoms Depression diagnosis Informant report of depression Depression diagnosis	0.02 0.056 <0.01 0.05	845	Positive	Positive
Cervilla (2006)	Threatening life events	No	CIDI	0.04	737	Positive	Positive

Chipman (2007)	Stressful life events Childhood adversity Family stress Persistent family adversity	No	Goldberg Depression Scale SMFQ	0.584 0.613 0.903 & 0.812 0.215 & 0.007 (opposite)	2095 (PATH20) 584 (ATP)	Negative	Negative
Chorbov (2007)	Traumatic life events	No	C-SSAGA	<0.0001 (opposite)	227	Negative	Negative
Cicchetti (2007)	Childhood maltreatment	No	DISC YSR	"NS" "NS"	339	Negative	Positive
Cicchetti (2011)	Childhood maltreatment	No	CDI & TRF (composite)	0.276	493	Negative	Partially supportive
Comasco (2011a)	Season of delivery	No	EPDS	n/a	219	Unclear	Partially supportive
Comasco (2011b)	Stressful life events	No	EPDS	n/a	275	Unclear	Positive
Conway (2010)	Chronic family stress	No	BDI SCID	"NS" “NS”	362	Negative	Negative
Coventry (2010)	Stressful life events	No	SSAGA DSSI	"NS" “NS” or p<0.05 (opposite)	3243	Negative	Negative
Dick (2007)	Stressful life events	No	SSAGA	n/a	1913	Unclear	Positive
Eley (2004)	Composite of family social adversity, parental education level, and threatening life events	No	SMFQ	0.09	377	Negative	Positive

Fergusson (2011)	Childhood adversity Adolescent/adult stressful life events Adult adversity	No	CIDI	"NS" or p<0.05 (opposite) "NS" "NS"	893	Negative	Negative
Gibb (2009)	Maternal expressed emotion - criticism	No	CDI	n/a	100	Unclear	Partially supportive
Gillespie (2005)	Personal stressful life events Network stressful life events	No	SSAGA Self-report questionnaire based on SCL-90 and DSSI SSAGA Self-report questionnaire based on SCL-90 and DSSI	0.43 0.66 0.74 0.15	1091	Negative	Negative
Goldman (2010)	Lifetime trauma Major life events	No	CES-D	0.025 0.294	984	Negative	Partially supportive
Grabe (2005)	Unemployment Number of chronic diseases	No	Von Zerssen complaint scale	n/a n/a	976	Unclear	Partially supportive
Grabe (2012)	Childhood abuse Adult trauma	No	BDI	0.2218 & 0.1680 0.4030 & 0.3858	1974	Negative	Partially supportive
Grassi (2010)	Stressful life events	No (although sample is breast cancer patients)	HAD-D	0.18	145	Negative	Negative
Hammen (2010)	Negative acute life events	No	BDI	"NS"	346	Unclear	Partially supportive

	Chronic family stress			n/a			
Hankin (2011)	Negative life events	No	CDI (nomothetic) CDI (idiographic)	>0.05 (t = 0.88) <0.001	220	Negative	Positive
Jacobs (2006)	Recent life events	No	SCL-90 (depression scale)	0.04	374	Positive	Positive
Jenness (2011)	Episodic life stressors Chronic family stress	No	CDI	0.88 0.02	200	Negative	Partially supportive
Kaufman (2004)	Childhood maltreatment	No	MFQ	0.01	101	Positive	Positive
Kaufman (2006)	Childhood maltreatment	No	MFQ	<0.03	196	Positive	Partially supportive
Kendler (2005)	Stressful life events	No	Structured diagnostic interview	0.04	549	Positive	Positive
Kilpatrick (2007)	Hurricane exposure	No	SCID	n/a	589	Unclear	Positive
Kim (2007)	Stressful life events	No	GMS (B3)	n/a	732	Unclear	Positive
Kim (2009)	Number of somatic disorders	No	GMS (B3)	0.048	521	Positive	Positive
Kohen (2008)	Stroke	Yes	Geriatric Depression Scale	0.045	150	Positive	Positive
Kraus (2007)	Interferon-alpha treatment for hepatitis C	Yes	HAD-D	0.413	139	Negative	Negative
Kumsta (2010)	Institutional deprivation	No	Rutter scales, SDQ, CAPA	0.007	125	Positive	Positive
Laucht (2009)	Stressful life events Family adversity	No	SCID (anxiety and depression) BDI	p<0.05 (opposite) “NS”	309	Negative	Negative

			SCID (anxiety and depression) BDI	"NS" "NS"			
Lazary (2008)	Threatening life events	No	ZSDS	0.0049	567	Positive	Positive
Lenze (2005)	Hip fracture	Yes	PRIME-MD HDRS	0.026 <0.001	23	Positive	Positive
Lotrich (2007)	Interferon-alpha treatment for hepatitis C	Yes	BDI SCID	"NS" p<0.05	71	Unclear	Positive
Mitchell (2011)	Low education level	No	CIDI-SF	"NS"	1206	Negative	Positive
Mossner (2001)	Parkinson's disease	Yes	HDRS	0.02	72	Positive	Positive
Nakatani (2005)	Acute myocardial infarction	Yes	ZSDS	0.01	2509	Positive	Positive
Otte (2007)	Coronary disease	Yes	DIS	0.04	557	Positive	Positive
Petersen (2012)	Stressful life events	No	YSR & CBCL (composite)	0.035	436	Positive	Positive
Phillips-Bute (2008)	Coronary artery bypass graft surgery	Yes	CES-D	0.70 & 0.02	427	Negative	Negative
Power (2010)	Recent life events	No	MINI CES-D	0.08 & 0.70 0.47 & 0.82	1421	Negative	Negative
Quinn (2012)	Early life stress	No	MINI	"NS"	256	Negative	Partially supportive
Ramasubbu (2006)	Stroke	Yes	SCID	0.025	51	Positive	Positive
Ressler (2010)	Childhood trauma	No	BDI SCID	"NS" 0.016	1072	Unclear	Positive
Ritchie (2009)	Parents excessively sharing problems	No	MINI, CES-D & taking antidepressants (composite)	0.027 (opposite)	942	Negative	Partially supportive

	Poverty Other childhood traumatic experiences			0.025 (opposite) "NS"			
Scheid (2007)	Life stressors	No	CES-D	0.24 & 0.44 & 0.72 & 0.33 & 0.47 & 0.91 & 0.04	568	Negative	Positive
Scheid (2011)	Life stressors	No	CES-D	"NS"	698	Negative	Partially supportive
Sen (2010)	Medical internship	Yes	PHQ-9	0.002	740	Positive	Positive
Sjöberg (2006)	Type of residence Parental separation Traumatic conflicts within the family Composite	No	DSRS	0.106 0.106 0.019 0.004	200	Negative	Partially supportive
Stefanis (2011)	Military conscription	Yes	SCL-90-R	0.11	1594	Negative	Positive
Sugden (2010)	Bullying victimization	No	CBCL & TRF (composite)	0.013 & 0.508	2232	Negative	Positive
Surtees (2006)	Adverse life events	No	HLEQ	"NS"	4175	Negative	Negative
Taylor (2006)	Early life stress Negative life events	No	BDI	<0.008 <0.024	118	Positive	Positive
Tsuboi (2011)	Perceived stress	No	CES-D	<0.05	177	Positive	Positive
Uher	Childhood	No	DIS	0.003	847	Negative	Positive

(2011)	maltreatment			0.2312	(Dunedin) 930 (E-Risk)		
Wichers (2008)	Childhood trauma	No	SCL-90-R (depression scale) SCID	0.4 0.4	480	Negative	Partially supportive
Wilhelm (2006)	Adverse life events	No	DIS & CIDI	0.036 & 0.435	127	Negative	Positive
Wilhelm (2012)	Diabetes	Yes	Clinical interview PHQ-9 K10	0.81 "NS" 0.047	234	Negative	Positive
Zalsman (2006)	Stressful life events Childhood abuse	No	HDRS BDI HDRS BDI	0.04 0.51 0.20 0.19	316	Negative	Positive
Zhang (2009a)	Negative life events	No	Diagnostic Interview for Genetic Studies	0.005-0.006 (opposite)	792	Negative	Positive
Zhang (2009b)	Parkinson's disease	Yes	CES-D	0.804	306	Negative	Negative

List of acronyms: BDI: Beck Depression Inventory; CAPA: Child and Adolescent Psychiatric Assessment; CBCL: Child Behavior Checklist; CDI: Children's Depression Inventory; CES-D: Center for Epidemiological Studies Depression Scale; CIDI: Composite International Diagnostic Interview; CIDI-SF: Composite International Diagnostic Interview – Short Form; C-SSAGA: Child Semi-Structured Assessment for the Genetics of Alcoholism; DIS: Diagnostic Interview Schedule; DISC: Diagnostic Interview Schedule for Children; DSRS: Depression Self-Rating Scale; DSSI: Delusions-Symptoms-States Inventory; EPDS: Edinburgh Postnatal Depression Scale; GMS: Geriatric Mental State schedule; HAD-D: Hospital Anxiety and Depression scale – depression subscale; HDRS: Hamilton Depression Rating Scale; HLEQ: Health and Life Experiences Questionnaire; K10: Kessler Psychological Distress Scale; MFQ: Mood and Feelings Questionnaire; MINI: Mini International Neuropsychiatric Interview; PHQ-9: Patient Health Questionnaire; PRIME-MD: Primary Care Evaluation of Mental Disorders; SCAN: Schedules for Clinical Assessment in Neuropsychiatry; SCID: Structured Clinical Interview for DSM Disorders; SCL-90-R: Symptom Checklist 90 Revised; SDQ: Strengths and Difficulties Questionnaire; SMFQ: Short Mood and Feelings Questionnaire; SSAGA: Semi-Structured Assessment for the Genetics of Alcoholism; TRF: Teacher Report Form; YSR: Youth Self-Report; ZSDS: Zung Self-rating Depression Scale;

P-values apply to the specific combination of stressor and depression measure listed. “NS” stands for non-significant, in cases where an exact p-value was unavailable. n/a indicates those studies for which the p-value for a two-way interaction could not be found and which were subsequently coded as unclear. Multiple p-values may be given for a single stressor-depression measure combination in case of, for example, multiple time points or multiple definitions of the same stressor (e.g., no abuse versus any abuse & no or mild abuse versus moderate or severe abuse). For significant p-values, “opposite” indicates a significant interaction in the opposite direction as expected (i.e., greater risk of depression for L allele carriers). For non-significant p-values, the direction of the effect (expected or opposite) is not indicated.

Supplemental table 1: Pivotal sentence(s) from the abstract of the 13 negative studies with a positive focus.

Study	Sentence(s) from abstract
Brown (2013)	"The short variant of the serotonin transporter gene specifically sensitizes to the effect of early-life experience of abuse or neglect on whether an adult depressive episode takes a chronic course. This interaction may be responsible for a substantial proportion of cases of chronic depression in the general population."
Cichetti (2007)	"Gene x environment interactions were observed. (…) Sexual abuse and the 5-HTT short/short genotype predicted higher depression, anxiety, and somatic symptoms."
Eley (2004)	"Furthermore, there was a significant genotype-environmental risk interaction for 5HTTLPR in female subjects only, with the effect being in the same direction as another recent study, reaffirming that an important source of genetic heterogeneity is exposure to environmental risk."
Hankin (2011)	"These findings suggest that 5-HTTLPR confers susceptibility to depression via stress reactivity."
Mitchell (2011)	"Using a nontruncated measure of a chronic environmental stressor—socioeconomic status—measured by education, and two polymorphisms (5-HTTLPR and STin2 VNTR) of the serotonin transporter gene (5-HTT), we find strong evidence that some women are genetically more reactive to the environment, resulting in a crossover of risks of postpartum depression for the most reactive groups."
Scheid (2007)	"These data offer modest support to other reports of gene-environment

	interaction and highlight the importance of considering specific stressful life events."
Stefanis (2011)	"Despite limitations linked to the evaluation of psychopathology by a single general scale and multiple comparisons, the present study supports a role of SLC6A4 in modulating abnormal responses to environmental stress."
Sugden (2010)	"These findings are further evidence that the 5-HTTLPR moderates the risk of emotional disturbance after exposure to stressful events."
Uher (2011)	"The specific effect on persistent depression increases the significance of this G x E for public health. Research that does not distinguish persistent course may underestimate G x E effects and account for some replication failures in G x E research."
Wilhelm (2006)	"The 5-HTTLPR genotype is a significant predictor of onset of major depression following multiple adverse events. This is one of the more robust findings concerning specific biological risk factors for depression."
Wilhelm (2012)	"Findings suggest that 5HTTLPR/rs25531 genotype is associated with psychological distress in a sample of subjects with diabetes."
Zalsman (2006)	"Lower-expressing transporter alleles, directly and by increasing the impact of stressful life events on severity, explain 31% of the variance in major depression severity."
Zhang (2009)	"The 5-HTTLPR polymorphism may modify the interaction between negative life events and MDD in the Chinese population."

Caption: The table provides the pivotal sentence(s) from the abstract of the 13 negative studies that were coded as having a positive focus. These sentences suggest that the results support the 5-HTTLPR x stress hypothesis, even though the results were actually coded as negative.

Supplemental table 2. Preferential citation by study category

		Cited studies				
		Positive	**Negative without positive focus**	**Negative with (partially) positive focus**	**Unclear**	**Total**
	Number of studies	*24 (33%)*	*16 (22%)*	*21 (29%)*	*11 (15%)*	*73 (100%)*
Citing studies	**Positive**	80 (55%)	26 (18%)	28 (19%)	11 (8%)	145 (100%)
	Negative without positive focus	43 (42%)	31 (30%)	19 (19%)	9 (9%)	102 (100%)
	Negative with (partially) positive focus	77 (46%)	28 (17%)	43 (26%)	18 (11%)	166 (100%)
	Unclear	36 (48%)	12 (16%)	18 (24%)	9 (12%)	75 (100%)
	Overall	236 (48%)	97 (20%)	108 (22%)	47 (10%)	488

Caption: Number of within-network citations by each study category (in rows) given to studies of each category (in columns).

Supplemental Table 3. Sensitivity analysis of mean and median number of citations (raw and year-adjusted) for negative, unclear, and positive studies.

		Negative	Unclear	Positive	
				With Caspi	Without Caspi
Within-network citations	Mean (SD)	5.5 (9.3)	4.3 (6.2)	9.8 (14.6)	7.4 (8.9)
	Median (IQR)	1 (0 – 6)	2 (1 – 3.5)	5 (2 – 10.5)	5 (2 – 8.5)
% of subsequent studies citing	Mean (SD)	10.5 (13.9)	9.2 (9.1)	16.8 (20.6)	13.6 (13.3)
	Median (IQR)	6.3 (0 – 14.6)	5.9 (3.1 – 11.4)	9.6 (6.2 – 20.4)	9.5 (5.7 – 19.8)
Web of Science citations	Mean (SD)	55.6 (72.3)	78.2 (61.6)	257.8 (765.5)	103.8 (132.4)
	Median (IQR)	31.5 (16.0 – 53.0)	58 (33 – 122.5)	56 (36.3 – 117.3)	46 (35.5 – 95.5)
Yearly citation rate	Mean (SD)	7.5 (6.7)	10.2 (6.6)	24.9 (63.4)	12.2 (12.8)
	Median (IQR)	5.5 (3.6 – 9.1)	9.7 (5.3 – 13.2)	7.7 (5.5 – 14.8)	7.4 (5.3 – 11.8)

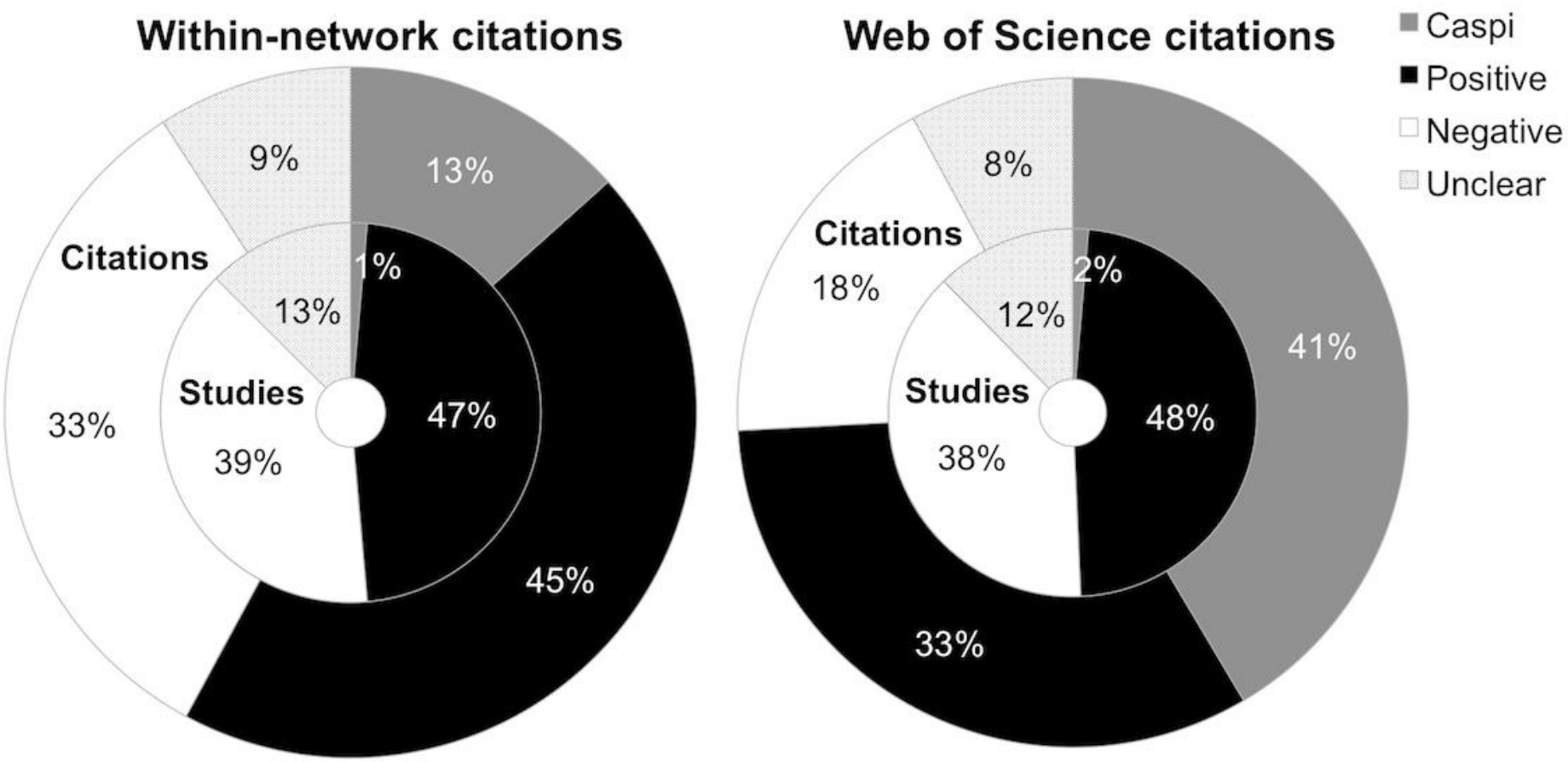
Caption: Mean (SD) and median (IQR) number of within-network citations, percentage of subsequent studies citing a given study, number of Web of Science citations, and yearly citation rate for negative, unclear, and positive studies.

Supplemental Table 4. Sensitivity analysis of mean and median number of citations (raw and year-adjusted) for negative studies without a positive focus and with a (partially) positive focus.

		No positive focus	Partially positive focus	Positive focus
Within-network citations	Mean (SD) Median (IQR)	6.1 (9.5) 1.5 (0.0 – 6.3)	3.1 (5.9) 0.0 (0.0 – 3.0)	6.7 (11.3) 1 (0 – 6.5)
% of subsequent studies citing	Mean (SD) Median (IQR)	11.7 (14.6) 5.8 (0.0 – 17.5)	6.3 (9.4) 0.0 (0.0 – 9.7)	12.1 (16.1) 7.7 (0 – 12.3)
Web of Science citations	Mean (SD) Median (IQR)	42.4 (44.8) 26.5 (15.8 – 41.0)	40.7 (40.5) 33.0 (15.0 – 37.0)	82.2 (106.6) 40.0 (16.0 – 88.0)
Yearly citation rate	Mean (SD) Median (IQR)	5.6 (4.0) 4.5 (3.3 – 7.6)	6.7 (3.7) 6.6 (5.0 – 8.8)	10.5 (9.7) 8.8 (4.0 – 13.5)

Caption: Mean (SD) and median (IQR) number of within-network citations, percentage of subsequent studies citing a given study, number of Web of Science citations, and yearly citation rate for negative studies without a positive focus, with a partially positive focus, and with a positive focus.

Supplementary figure 1



Supplementary figure 2